

In the Claims:

1-3. (Cancelled).

4. (Currently amended) ~~The isolated nucleic acid of Claim 1, wherein 1 An isolated nucleic acid encoding a functional CATERPILLER 11.3 polypeptide, said isolated nucleic acid comprises comprising a nucleotide sequence selected from the group consisting of:~~

- (a) ~~the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:13, SEQ ID NO:17[[],] or SEQ ID NO:19, SEQ ID NO:23, SEQ ID NO:27, SEQ ID NO:33 or SEQ ID NO:148;~~
- (b) ~~a nucleotide sequence having at least 95% sequence similarity to SEQ ID NO:19 a nucleotide sequence consisting essentially of a fragment of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:13, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:23, SEQ ID NO:27, SEQ ID NO:33 or SEQ ID NO:148, wherein said fragment encodes a functional polypeptide;~~
- (c) ~~a nucleotide sequence that hybridizes to the complement of the nucleotide sequences of (a) or (b) under stringent hybridization conditions defined by a wash of 50% Formamide, 5X Denhardt's solution, 0.5% SDS and 1X SSPE at 42°C and encodes a functional polypeptide; and~~
- (d) ~~a nucleotide sequence that differs from the nucleotide sequences of (a), (b) and (c) above due to the degeneracy of the genetic code.~~

5-15. (Cancelled)

16. (Currently Amended) An isolated nucleic acid encoding a functional fragment of a CATERPILLER 11.3 polypeptide selected from the group consisting of:

- (a) a functional fragment comprising at least a nucleotide binding domain and/or a leucine-rich repeat of the polypeptide sequence of SEQ ID NO:18 or SEQ ID NO:20
- (b) a functional fragment of an amino acid sequence having at least 95% sequence similarity to (a);

(c) a functional fragment comprising at least a nucleotide binding domain and/or a leucine-rich repeat encoded by the nucleotide sequence of SEQ ID NO:17 or SEQ ID NO:19; and

(d) a functional fragment encoded by a nucleotide acid sequence having at least 95% sequence similarity to (c)

~~The isolated nucleic acid of Claim 1, wherein said isolated nucleic acid comprises a nucleotide sequence that encodes a functional polypeptide that has at least about 80% amino acid sequence identity to an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:14, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:24, SEQ ID NO:28, SEQ ID NO:34, SEQ ID NO:149 and a functional fragment of any of the foregoing.~~

17-19. (Canceled)

20. (Currently amended) [[A]]An isolated cell comprising the isolated nucleic acid of Claim [[1]]4.

21-26. (Canceled)

27. (Withdrawn-Currently amended) A method of modulating the cellular activity of a CATERPILLER 11.3 polypeptide encoded by the nucleic acid of claim 4~~selected from the group consisting of Monarch-1, CIAS1, CATERPILLER 11.2, CATERPILLER 11.3, CATERPILLER 16.1, CATERPILLER 16.2, and a functional fragment thereof~~, comprising introducing into a cell a compound that modulates the activity of the polypeptide in an amount effective to modulate the activity of the polypeptide in the cell.

28. (Withdrawn) The method of Claim 27, wherein the compound is an isolated nucleic acid encoding the polypeptide.

29. (Withdrawn) The method of Claim 27, wherein the compound is selected from the group consisting of an antisense oligonucleotide and a siRNA that targets the nucleic acid encoding the polypeptide.

30. (Withdrawn) The method of Claim 27, wherein the compound is an antibody that binds to the polypeptide.

31. (Withdrawn-Currently amended) A method of modulating cellular inflammatory responses, comprising introducing into a cell a compound that modulates the activity of a CATERPILLER 11.3 polypeptide encoded by the nucleic acid of claim 4selected from the group consisting of Monarch 1, CIAS1, CATERPILLER 11.2, CATERPILLER 11.3, CATERPILLER 16.1, CATERPILLER 16.2, and a functional fragment thereof, said compound introduced in an amount effective to modulate cellular inflammatory responses.

32. (Withdrawn) The method of Claim 31, wherein the compound is an isolated nucleic acid encoding the polypeptide.

33. (Withdrawn) The method of Claim 31, wherein the compound is selected from the group consisting of an antisense oligonucleotide and a siRNA that targets the nucleic acid encoding the polypeptide.

34. (Withdrawn) The method of Claim 31, wherein the compound is an antibody that binds to the polypeptide.

35. (Withdrawn-Currently amended) A method of modulating apoptosis, comprising introducing into a cell a compound that modulates the activity of a CATERPILLER 11.3 polypeptide encoded by the nucleic acid of claim 4selected from the group consisting of Monarch 1, CIAS1, CATERPILLER 11.2, CATERPILLER 11.3, CATERPILLER 16.1, CATERPILLER 16.2, and a functional fragment thereof, said compound introduced in an amount effective to modulate apoptosis.

36. (Withdrawn) The method of Claim 35, wherein the compound is an isolated nucleic acid encoding the polypeptide.

37. (Withdrawn) The method of Claim 35, wherein the compound is selected from the group consisting of an antisense oligonucleotide and a siRNA that targets the nucleic acid encoding the polypeptide.

38. (Withdrawn) The method of Claim 35, wherein the compound is an antibody that binds to the polypeptide.

39. (Withdrawn-Currently amended) A method of modulating Toll-like receptor activity, comprising introducing into a cell a compound that modulates the activity of a CATERPILLER 11.3 polypeptide encoded by the nucleic acid of claim 4selected from the group consisting of Monarch 1, CIAS1, CATERPILLER 11.2, CATERPILLER 11.3, CATERPILLER 16.1, CATERPILLER 16.2, and a functional fragment thereof, said compound introduced in an amount effective to modulate Toll-like receptor activity.

40. (Withdrawn) The method of Claim 39, wherein the compound is an isolated nucleic acid encoding the polypeptide.

41. (Withdrawn) The method of Claim 39, wherein the compound is selected from the group consisting of an antisense oligonucleotide and a siRNA that targets the nucleic acid encoding the polypeptide.

42. (Withdrawn) The method of Claim 39, wherein the compound is an antibody that binds to the polypeptide.

43. (Withdrawn) The method according to Claim 27, wherein the cell is a cultured cell.

44. (Withdrawn) The method according to Claim 27, wherein the cell is a cell *in vivo*.

45. (Withdrawn) A method of identifying a compound that binds to a CATERPILLER 11.3 polypeptide encoded by the nucleic acid of claim 4selected from the group consisting of Monarch 1, CATERPILLER 11.2, CATERPILLER 11.3, CATERPILLER 16.1, CATERPILLER 16.2, and a functional fragment of any of the foregoing, comprising:

contacting the polypeptide with a test compound under conditions whereby binding between the polypeptide and the test compound can be detected; and detecting binding between the polypeptide and the test compound.

46. (Withdrawn-Currently amended) A method of identifying a compound that modulates the activity of a CATERPILLER 11.3 polypeptide encoded by the nucleic acid of claim 4~~selected from the group consisting of Monarch-1, CATERPILLER 11.2, CATERPILLER 11.3, CATERPILLER 16.1, CATERPILLER 16.2, and a functional fragment of any of the foregoing,~~ comprising:

contacting the polypeptide with a test compound under conditions whereby modulation of the activity of the polypeptide can be detected; and detecting modulation of the activity of the polypeptide.

47. (Withdrawn-Currently amended) A method of identifying a compound that can modulate inflammatory responses, comprising:

contacting a CATERPILLER 11.3 polypeptide encoded by the nucleic acid of claim 4~~selected from the group consisting of Monarch-1, CIAS1, CATERPILLER 11.2, CATERPILLER 11.3, CATERPILLER 16.1, CATERPILLER 16.2 and a functional fragment of any of the foregoing~~ with a test compound under conditions whereby modulation of the activity of the polypeptide can be detected; and

detecting modulation of the activity of the polypeptide, thereby identifying a compound that can modulate inflammatory responses.

48. (Withdrawn-Currently amended) A method of identifying a compound that can modulate apoptosis, comprising:

contacting a CATERPILLER 11.3 polypeptide encoded by the nucleic acid of claim 4~~selected from the group consisting of Monarch-1, CIAS1, CATERPILLER 11.2, CATERPILLER 11.3, CATERPILLER 16.1, CATERPILLER 16.2 and a functional fragment of any of the foregoing~~ with a test compound under conditions whereby modulation of the activity of the polypeptide can be detected; and

detecting modulation of the activity of the polypeptide, thereby identifying a compound that can modulate apoptosis.

49. (Withdrawn-Currently amended) A method of identifying a compound that can modulate the Toll-like receptor pathway, comprising:

contacting a CATERPILLER 11.3 polypeptide encoded by the nucleic acid of claim 4~~selected from the group consisting of Monarch 1, CIAS1, CATERPILLER 11.2, CATERPILLER 11.3, CATERPILLER 16.1, CATERPILLER 16.2 and a functional fragment of any of the foregoing~~ with a test compound under conditions whereby modulation of the activity of the polypeptide can be detected; and

detecting modulation of the activity of the polypeptide, thereby identifying a compound that can modulate the Toll-like receptor pathway.

50. (Withdrawn) The method of Claim 45, wherein the method is carried out in a cell comprising the polypeptide.

51. (Withdrawn) The method of Claim 50, wherein the cell comprises an isolated nucleic acid comprising a nucleotide sequence encoding the polypeptide.

52. (Withdrawn) The method of Claim 51, wherein the cell is stably transformed with the isolated nucleic acid.

53. (Withdrawn) The method of Claim 45, wherein the method is carried out as a cell-free assay.

54. (Withdrawn) The method of Claim 45, wherein the method is carried out in a transgenic non-human mammal comprising an isolated nucleic acid comprising a nucleotide sequence encoding the polypeptide.

55. (New) The isolated nucleic acid of Claim 4, wherein said functional CATERPILLER 11.3 polypeptide inhibits NF- κ B function.

57. (New) The isolated nucleic acid of Claim 16, wherein said CATERPILLER 11.3 functional fragment inhibits NF- κ B function.